

Response dated: December 21, 2009
App. No. 10/658,089; Filed: September 9, 2003
Response to Office Action of June 19, 2009

REMARKS

Claims 1-53 were pending in this application. By this response, claims 1, 14-16, 34, 49 have been amended. Claims 13, 19-32, 47 have been canceled. No new matter has been added. As a result of a previous restriction requirement, claims 50-53 have been withdrawn. Cancellation or amendment of the claims is not to be considered a dedication to the public of any subject matter.

Thus, claims 1-12, 14-18, 33-46, 48, and 49 are currently under consideration. Reconsideration of these claims is requested in view of the amendments and the following remarks.

INFORMATION DISCLOSURE STATEMENTS

Applicants note that references submitted in Information Disclosure Statements dated 9/9/2003, 11/3/2004, 3/8/2005, and 6/20/2005 have not been acknowledged. It is respectfully requested that these references be considered and the PTO Forms 1449 initialed and returned with the next Action.

CLAIM REJECTIONS UNDER 35 U.S.C. § 112

Claims 19-32

Claims 19-32 currently stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants have canceled claims 19-32 with this amendment, rendering the rejection moot.

CLAIM REJECTIONS UNDER 35 U.S.C. § 102

Claims 1 and 33

Claims 1 and 33 currently stand rejected under 35 U.S.C. § 102(b) as being anticipated by WO 95/05783 to Martin et al. ("Martin"). In order for Applicants' claims to be anticipated by

Response dated: December 21, 2009
App. No. 10/658,089; Filed: September 9, 2003
Response to Office Action of June 19, 2009

Martin, the reference must disclose, either expressly or inherently, each and every element of the claimed invention.

Independent claim 1 currently recites, in part, a spinal prosthesis assembly, comprising a left prosthesis body, a left pedicle anchor coupled to the left prosthesis body, an artificial left facet joint structure carried by the left prosthesis body, a right prosthesis body, a right pedicle anchor coupled to the right prosthesis body, an artificial right facet joint structure carried by the right prosthesis body, the artificial left and right facet joint structures being configured to articulate with another spinal prosthesis assembly or with a natural articular process of an adjoining pedicle.

Martin discloses a dynamic vertebral prosthesis. The Martin prosthesis includes plates fixed to the vertebrae, and holding means (e.g., springs) which maintain the vertebrae in the correct position with respect to each other. The holding means exert elastic return forces to maintain the vertebrae together.

Martin does not anticipate claim 1 as Martin does not disclose, either expressly or inherently, each and every claim limitation of claim 1. For example, Martin does not disclose (1) the artificial left and right facet joint structures being configured to articulate with another spinal prosthesis assembly or with a natural articular process of an adjoining pedicle. In Martin, the holding means provide tension and elasticity to hold the vertebrae in place with respect to each other. The Martin prosthesis may provide stabilization for vertebrae, but does not provide for articulation between the prosthesis and another prosthesis or the natural articular process of an adjoining pedicle. However, in claim 1, the left and right prosthesis bodies each carry an artificial facet joint structure, and each artificial facet joint structure is configured to articulate with another spinal prosthesis assembly or with a natural articular process of an adjoining pedicle. Thus, Martin does not disclose the structure described in claim 1.

As such, Martin does not disclose, either expressly or inherently, each and every claim limitation of independent claim 1. Claim 33 depends from claim 1 and is not anticipated by Martin for at least the same reasons set forth above. Applicants respectfully request the rejections to claims 1 and 33 be withdrawn.

Claims 1-4, 12-18, 34-38, and 46-49

Claims 1-4, 12-18, 34-38, and 46-49 currently stand rejected under 35 U.S.C. § 102 (b) as being anticipated by any of U.S. 5,314,486 to Zang et al. (“Zang”), U.S. 4,693,722 to William H. Wall (“Wall”), U.S. 4,778,472 to Homsy et al. (“Homsy”), and U.S. 4,917,701 to Douglas H. Morgan (“Morgan”). In order for Applicants’ claims to be anticipated by any of Zang, Wall, Homsy, or Morgan, each reference must disclose, either expressly or inherently, each and every element of the claimed invention.

Independent claim 1 currently recites, in part, a spinal prosthesis assembly, comprising a left prosthesis body, a left pedicle anchor coupled to the left prosthesis body, an artificial left facet joint structure carried by the left prosthesis body, a right prosthesis body, a right pedicle anchor coupled to the right prosthesis body, an artificial right facet joint structure carried by the right prosthesis body, the artificial left and right facet joint structures being configured to articulate with another spinal prosthesis assembly or with a natural articular process of an adjoining pedicle.

Zang discloses a prosthetic replacement device for a metatarso-phalangeal joint. The Zang prosthetic includes a convex bearing surface having a stem configured to be received in the resected metatarsal bony shaft, and a concave bearing surface having a stem configured to be received within the resected phalangeal bony shaft.

Zang does not anticipate claim 1 as Zang does not disclose, either expressly or inherently, each and every claim limitation of claim 1. For example, Zang does not disclose (1) the artificial left and right facet joint structures being configured to articulate with another spinal prosthesis assembly or with a natural articular process of an adjoining pedicle. In Zang, the convex bearing surface has a stem configured to articulate with the resected phalangeal bony shaft. However, Zang does not disclose a left and right prosthesis, where each left and right prosthesis is configured to articulate with another prosthesis or with a natural articular process of an adjoining pedicle. Thus, Zang does not disclose the structure described in claim 1.

Wall discloses a prosthetic device for a temporomandibular joint. The Wall prosthetic includes a pair of plates that are clamped about the ramus of the mandible, and a convex bearing surface that receives one of the plates to form a condyle.

Wall does not anticipate claim 1 as Wall does not disclose, either expressly or inherently, each and every claim limitation of claim 1. For example, Wall does not disclose (1) the artificial left and right facet joint structures being configured to articulate with another spinal prosthesis assembly or with a natural articular process of an adjoining pedicle. In Wall, the convex bearing surface articulates with one of the plates that is clamped about the ramus. However, Wall does not disclose a left and right prosthesis, where each left and right prosthesis is configured to articulate with another prosthesis or with a natural articular process of an adjoining pedicle. Thus, Wall does not disclose the structure described in claim 1.

Homsy discloses a prosthetic device for a temporomandibular joint. The Homsey prosthetic includes a first part which replaces the natural glenoid fossa and articular eminence of a natural TM joint, and a second part which replaces the natural condylar head.

Homsy does not anticipate claim 1 as Homsey does not disclose, either expressly or inherently, each and every claim limitation of claim 1. For example, Homsey does not disclose (1) the artificial left and right facet joint structures being configured to articulate with another spinal prosthesis assembly or with a natural articular process of an adjoining pedicle. In Homsey, the a first part, which replaces the natural glenoid fossa and articular eminence of a natural TM joint, is configured to articulate with a second part, which replaces the natural condylar head. However, Homsey does not disclose a left and right prosthesis, where each left and right prosthesis is configured to articulate with another prosthesis or with a natural articular process of an adjoining pedicle. Thus, Homsey does not disclose the structure described in claim 1.

Morgan discloses a prosthetic device for a temporomandibular joint. The Morgan prosthetic is similar to the Wall prosthetic in that it includes a plate that is formed to the ramus of the mandible, and an artificial condyle.

Morgan does not anticipate claim 1 as Morgan does not disclose, either expressly or inherently, each and every claim limitation of claim 1. For example, Morgan does not disclose (1) the artificial left and right facet joint structures being configured to articulate with another spinal prosthesis assembly or with a natural articular process of an adjoining pedicle. In Morgan, the plate formed with the ramus of the mandible is configured to articulate with an artificial condyle. However, Morgan does not disclose a left and right prosthesis, where each left and

Response dated: December 21, 2009
App. No. 10/658,089; Filed: September 9, 2003
Response to Office Action of June 19, 2009

right prosthesis is configured to articulate with another prosthesis or with a natural articular process of an adjoining pedicle. Thus, Morgan does not disclose the structure described in claim 1.

As such, Zang, Wall, Homsy, and Morgan do not disclose, either expressly or inherently, each and every claim limitation of independent claim 1. Claims 2-4, 12-18, 34-38, 46, 48, and 49 depend from claim 1 and are not anticipated by Zang, Wall, Homsy, and Morgan for at least the same reasons set forth above. Applicants respectfully request the rejections to claims 1-4, 12-18, 34-38, and 46, 48, and 49 be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. § 102/103

Claims 19-32

Claims 19-32 currently stand rejected under 35 U.S.C. § 102(b) as anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as being unpatentable over any of Wall, Homsy, Morgan, and Zang.

Applicants have canceled claims 19-32 with this amendment, rendering the rejection moot.

CLAIM REJECTIONS UNDER 35 U.S.C. § 103

Claims 5-7 and 39-41

Claims 5-7 and 39-41 currently stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Zang, as applied to claim 1, and further in view of U.S. 5,609,641 to Johnson et al. ("Johnson").

Claims 5-7 and 39-41 depend from claim 1 and therefore include all of the limitations of those claims. Johnson fails to disclose or suggest features of claim 1 that are lacking in Zang, such as the artificial left and right facet joint structures being configured to articulate with another spinal prosthesis assembly or with a natural articular process of an adjoining pedicle. The combination of Zang and Johnson therefore cannot render claims 5-7 and 39-41 obvious. Claims 5-7 and 39-41 are patentable over Zang and Johnson under § 103(a).

Response dated: December 21, 2009
App. No. 10/658,089; Filed: September 9, 2003
Response to Office Action of June 19, 2009

Claims 8-11 and 42-45

Claims 8-11 and 42-45 currently stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Zang, as applied to claim 1, and further in view of U.S. 4,955,916 to Carignan et al. (“Carignan”).

Claims 8-11 and 42-45 depend from claim 1 and therefore include all of the limitations of those claims. Carignan fails to disclose or suggest features of claim 1 that are lacking in Zang, such as the artificial left and right facet joint structures being configured to articulate with another spinal prosthesis assembly or with a natural articular process of an adjoining pedicle. The combination of Zang and Carignan therefore cannot render claims 8-11 and 42-45 obvious. Claims 8-11 and 42-45 are patentable over Zang and Carignan under § 103(a).

Response dated: December 21, 2009
App. No. 10/658,089; Filed: September 9, 2003
Response to Office Action of June 19, 2009

CONCLUSION

In light of the remarks set forth above, Applicants respectfully request the Examiner expedite the prosecution of this patent application to issuance. If it is determined that a telephone conference would aid in the prosecution of this application, the Examiner is invited to telephone the undersigned at (650) 287-2163.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 50-4050 referencing docket no. 10002-701.409. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Date: 12/21/09

Respectfully submitted,
By: Douglas C. Limbach
Douglas C. Limbach
Registration No. 35,249

SHAY GLENN LLP
2755 CAMPUS DRIVE, SUITE 210
SAN MATEO, CA 94403
TELEPHONE: 650.287.2163
FACSIMILE: 650.212.7562